

AMENDMENTS TO THE CLAIMS

1 1-20. (canceled)

1 21. (currently amended) A companion body fluid analyzing cartridge comprising:

2 a body having a top side and a bottom side;

3 a base element, on said bottom side of said body, detachably connected to a

4 side of ~~mated with~~ an associated sensing cartridge body that performs ~~is designed to perform~~

5 an analyzing operation on a body fluid;

6 a port, on the base element, aligned with a second port on ~~for fluid~~

7 ~~communication with the~~ companion body fluid analyzing cartridge body; and

8 a first tube connected to said port;

9 a fluid reservoir, connected to said first tube ~~in fluid communication with said~~

10 ~~port,~~ said fluid reservoir containing a fluid that is to be provided to said associated sensing

11 cartridge body, said fluid reservoir also being a waste reservoir and connected to a second

12 tube to receive waste materials from said associated sensing cartridge body, ~~said companion~~

13 ~~body fluid analyzing cartridge being a modular subcomponent of said associated sensing~~

14 cartridge.

1 22. (currently amended) The companion body fluid analyzing cartridge according to

2 claim 21, wherein the companion cartridge detachably connects ~~mates~~ with said associated

3 sensing cartridge body by at least one of a fluid interface, a mechanical interface, and an

4 electrical interface.

1 23. (currently amended) The companion body fluid analyzing cartridge of claim 21,
2 further comprising a reagent storage system comprising said fluid reservoir. ~~in fluid~~
3 ~~communication with said port.~~

1 24. (currently amended) The companion body fluid analyzing cartridge of claim 21,
2 further comprising a calibration fluid system comprising said fluid reservoir. ~~in fluid~~
3 ~~communication with said port.~~

1 25. (previously submitted) The companion body fluid analyzing cartridge of claim 24,
2 further comprising a waste retrieval system connected to the calibration fluid system.

1 26. (currently amended) The companion body fluid analyzing cartridge of claim 21,
2 further comprising an assay element preparation system comprising ~~in fluid communication~~
3 ~~with~~ said fluid reservoir.

1 27. (previously submitted) The companion body fluid analyzing cartridge of claim 26,
2 wherein the assay element preparation system includes one or more processes selected from
3 the group consisting of a blood chemistry process, a hematology process, an immuno-
4 diagnostics process, and a DNA testing process.

1 28. (previously submitted) The companion body fluid analyzing cartridge of claim 26,
2 wherein the assay element preparation system includes one ore more operations selected from
3 the group consisting of a thermo cycling operation, an incubation operation, and an isolation
4 operation.

1 29. (currently amended) The companion body fluid analyzing cartridge of claim 21,
2 wherein the associated companion cartridge body comprises a carrier fluid system connected
3 to said first port. in fluid communication with said port.

1 30. (previously submitted) The companion body fluid analyzing cartridge of claim 29,
2 wherein the carrier fluid system is programmed to increase at least a portion of the volume of
3 an assay element.

1 31. (previously submitted) The companion body fluid analyzing cartridge of claim 29,
2 wherein the carrier fluid system is connected to a waste retrieval system.

1 32. (previously submitted) The companion body fluid analyzing cartridge of claim 29,
2 further comprising an assay element, wherein the carrier fluid remains essentially unmixed
3 with the assay element.

1 33. (previously submitted) The companion body fluid analyzing cartridge of claim 29,
2 further comprising an assay element preparation system, wherein the carrier fluid remains
3 essentially unmixed with the assay element.

1 34. (currently amended) An analytical instrument comprising:
2 a companion body fluid analyzing cartridge body comprising a reagent storage
3 system connected to a first tube and a waste retrieval system connected to a second tube, both
4 said reagent storage system and said waste retrieval system comprising a same fluid reservoir,
5 said same fluid reservoir connected to said first tube for providing a reagent to said reagent
6 storage system and connected to said second tube for receiving waste fluid from said waste

7 ~~retrieval system such that said reagent storage system and said waste retrieval system share at~~
8 ~~least one fluid reservoir, and~~
9 a sensor cartridge detachably connected to and providing adjacent to and in
10 fluid communication with the companion body fluid analyzing cartridge body, wherein the
11 sensor cartridge provides chemical analysis of an assay element.

1 35. (currently amended) An analytical instrument comprising:
2 a companion body fluid analyzing cartridge body comprising a calibration
3 fluid system connected to a first tube and a waste retrieval system connected to a second tube,
4 both said calibration system and said waste retrieval system comprising a same fluid
5 reservoir, said same fluid reservoir connected to said first tube for providing a fluid to said
6 calibration system and connected to said second tube for receiving waste fluid from said
7 ~~waste retrieval system such that said calibration fluid system and said waste retrieval system~~
8 ~~share at least one fluid reservoir, and~~
9 a sensor cartridge detachably connected to and providing adjacent to and in
10 fluid communication with the companion body fluid analyzing cartridge body, wherein the
11 sensor cartridge provides chemical analysis of an assay element.

1 36. (currently amended) An analytical instrument comprising:
2 a companion body fluid analyzing cartridge body comprising an assay element
3 preparation system connected to a first tube and a waste retrieval system connected to a
4 second tube, both said assay element preparation system and said waste retrieval system
5 comprising a same fluid reservoir, said same fluid reservoir connected to said first tube for
6 providing a fluid to said assay element preparation system and connected to said second tube

7 ~~for receiving waste fluid from said waste retrieval system such that said assay element~~
8 ~~preparation system and said waste retrieval system share at least one fluid reservoir, and~~
9 a sensor cartridge detachably connected to and providing adjacent to and in
10 fluid communication with the companion body fluid analyzing cartridge body, wherein the
11 sensor cartridge provides chemical analysis of an assay element.

1 37. (currently amended) An analytical instrument comprising:
2 a companion body fluid analyzing cartridge body comprising a carrier fluid
3 system comprising a first fluid tube and a waste retrieval system comprising a second fluid
4 tube, both said carrier fluid system and said waste retrieval system comprising a same fluid
5 reservoir, said same fluid reservoir connected to said first fluid tube and said second fluid
6 tube ~~such that said carrier fluid system and said waste retrieval system share at least one fluid~~
7 ~~reservoir, and~~
8 a sensor cartridge detachably connected to and providing adjacent to and in
9 fluid communication with the companion body fluid analyzing cartridge body, wherein the
10 sensor cartridge provides chemical analysis of an assay element.

1 38.-43. (canceled)